

Republic of the Philippines Provincial Government of Palawan PROVINCIAL DISASTER RISK REDUCTION AND MANAGEMENT OFFICE Capitol Complex, Puerto Princesa City



AFTER ACTIVITY REPORT

Title of Activity	HAZARD, VULNERABILITY, AND CAPACITY ASSESSMENT OF BAROTUAN NATIONAL HIGH SCHOOL, BRGY. BAROTUAN, EL NIDO, PALAWAN			
Date	AUGUST 26, 2021			
Venue	PUROK A, BRGY. BAROTUAN, EL NIDO PALAWAN			
Overview	The safety of both the learners and the teachers in the school establishments are of primary concerns for PDRRMO and the PGP. Thus, assessment of hazards, vulnerabilities, and capacities of the schools is one of the thrusts of the office as it is also one of the concerns by the Governor.			
	A team of PDRRMO staff is usually sent to the schools, especially prioritizing those with reported incident of hazard occurrence and with indications of imminent danger. Using the PDRRMO HVCA Assessment Tool, the team surveys the general location of the target area and inspects the hazard prone buildings and other infrastructures. The tool would also take note of the pertinent information and detailed condition of the school.			
	Relevant information gathered by the team will become part of the school assessment report of the PDRRMO and a copy of the reports will be furnished to the concerned agencies for proper action should there be a need. The Provincial School Board will also be furnished a copy so they can better assess situation and aide their legislations guiding the construction and/or establishing school buildings and facilities in the province of Palawan.			
	Having knowledge of the current situations and conditions of the so will enable the PDRRMO to advice or recommend to concerned age measures to mitigate and/or prevent damage or effect of the hazard to the prior to any incident.			
	This maybe are small steps, but still can contribute to the general goal of the office in making Palawan a "Listo, Matatag at Panatag" community.			
Objectives	 Assess and evaluate the current status of Barotuan Naional High School El Nido Palawan. Acquire GPS of the locations visited. Produce recommendations and encourage for actions to secure, maintain, and improve a safe status for the visited school. 			
Participants	Team Leader: Nestor A. Asag, Research & Planning Division Chief Team Members: -Joey S. Heredero -Maria Alyssa G. Abonales -Benjamin P. Alba -Justine Jean M. Toledo			
Daily Highlights	Besides the participation in the conduct of the CDRA Training in El Nido, the group was also advised by the Provincial DRRM Officer, Jeremias Y. Alili to conduct hazard assessments of a few critical infrastructures: identified schools. The group decided while there is free opportunity during the training, they will split			

in two where the abovementioned team will visit a number of schools to conduct hazard assessment of their location

The Provincial DRRM Officer advised the team to visit a number of schools that have been known to have existing nearby hazards. This included the Barotuan National High School (NHS). With the current weather status of intermittent heavy rains and the large steep slope in its immediate vicinity predominantly made of loose gravel and soft dirt turned mud due to rains, the team saw fit to have the hazard assessment at this school accomplished as soon as possible.

The team coordinated with the Barotuan National High School Staff at the admin office of the school. The team initially was accompanied by the school counselor, Ms. Darlene M. Jose and later the principal, Ms. Amsie Aniasco. They were able to briefly discuss the team's purpose of visit. The Guidance Counselor was able to facilitate the ocular inspection around the school. After the ocular observation, the principal arrives where she took the opportunity to discuss the current and dire situation of the operations surrounding the immediate hazard: the slope in the school's north side.

Findings, Results and Analysis

Barotuan National High School, Brgy. Barotuan, El Nido, Palawan is located about N11°18'34.5 and E119°27'11.9 about 35masl elevation, adjacent to a main road. It caters to about 1,200 students with 48 school staff.

The school is headed by Ms. Amsie Aniasco, Principal with contact number 0917-773-7355 and email address: amsie.aniasco01@deped.com.ph.

The school has 15 buildings including its newly constructed three 3 story buildings and some other old buildings that were either retrofitted or to be condemned. The school has buildings that have existed in the early 1990s and the later ones as late as 2013. At least two buildings in the campus are condemned (old Laboratory and Admin buildings), three are recently built (3 floors), two are concrete (2 floors) and in relatively good condition, 3 small buildings built in early 1990s are now in poor condition and the rest are a mix of wood and concrete, retrofitted to become classrooms and one as the canteen.

The school is situated at the foot of a mountain standing at 102masl on the school's northern part. The school is built approximately 10m to 40m from the slope of the mountain with an inclination of 70° for at least 18-25m or 60ft. The slope is bear with no vegetation, the substrate is clayish and loose with some large slabs of rock, thus, making the school highly vulnerable to landslide even with moderate rain.

Its AIM building and other classrooms that are near the southeast back area of the school is near a pit that is slowly being reclaimed with soil taken from the massive slope at its north area. This material is soft and rain easily erodes it without proper support. The area being reclaimed will need stronger base material before using this softer substrate. Additionally, a revetment or rigid slope protection may be necessary to ensure that the reclaimed area holds.

The contractor of the newly built buildings also has not completed the finishing of the newly built three-story buildings, with some pipes still exposed,

areas unpainted and hollow blocks exposed in the buildings' base. There are metal wires that are hazardous for passersby which needs to be cleaned up. People walking close to these areas may have a risk to be caught up in the rough exterior and the untidily left metal wires. The valves of the 2 three-story buildings (Bldg 1 with the admin office and the building next to it) are either buried or semi-sunken due to the soil accumulating in its area from the massive slope in the north side at the time of this visit. The buried valves are now inaccessible and very difficult to locate. Due to the blockage of pipes and valves, repairs are nearly impossible, as the steady accumulation of mud and debris has buried these fixtures. Water is slowly accumulating near the buildings adjacent to the slope in the north side of the school, slowly destroying the building and its water system. In fact, the restroom nearest the slope of the admin building is unusable due to the blocked drains, water is beginning to seep inside the restroom through its drain. The accumulation of water and the absence of drainage systems will inevitably become a health threat when they become breeding grounds for dengue-carrying mosquitoes. The contractor operating to remove and level the slope should install a temporary drainage for rainwater runoff to redirect the flow and avoid accumulation. Additionally, slope protection and bulkheads could be installed so that debris and mud accumulation can be prevented from further damaging the nearby school buildings. The construction of these bulkheads should consider the possible volume of displaced mud and rocks that could collapse due to the steep incline and substrate of the slope and absence of vegetation whenever it rains.

Additionally, two of the more recently built three-story buildings are adjacent to the massive bare slope side to the north area of the school with a steepness that easily exceeds 70°. Soil and mud, and occasionally rocks, whenever it rains always collapse with a rapid downflow and accumulate in the ground below. Water during these rains, instead of flowing away, further push this accumulation and pool at the building walls. Rain forms a small waterfall alongside this bare mountain slope. There are no slope protection, measures nor drainage to redirect the water safely away from the school. Staff that park in the parking space whenever it rains always slip and fall because a steady flow of water from rain gets directed towards the school instead of away. Slipping accidents are concerningly frequent in this area, a hazard easily available if the contractor is not negligible to installing proper safety systems to their operations. This is because the slope faces the school and the contractor makes no effort to ensure safety. Yet, according to the principal, the contractor in charge of taking away this hazardous slope, JZ and JS Trading headed by Mr. Silverio Alvenda Jr is not operating with urgency. The said contractor has been taking out small batches of soil even before they were able to acquire a permit from DENR as early as May 2021. Their permit only started on July 22, 2021. During the visit and at present, a large part of the mountain still remains with no safety measures installed at all in the area as evident in the photos attached in this report. Again, the contractor operating to remove and level the slope should install a temporary drainage for rainwater runoff to redirect the flow and avoid accumulation. Further, the operations must install safety measures and implement safety practices for their workers as prescribed in Philippine OSH by DOLE. The contractors lack of understanding to the seriousness of the matter on safety must be properly addressed.

On August 25, 2021, only one day before the team visited, a large chunk of the mountain collapsed and almost injured many of the Brigada Eskwela participants if they weren't fast enough to run away. More landslides have been

reported between the date of assessment and the submission of this report. Recently, in October 20, 2021, the PDRRMO was advised by the school management that the soil, water and mud accumulation is nearing overflowing over the classroom windows. These events are alarming especially that the safety of all school goers, staff and visitors are affected by this hazard. It has been a habit now that all staff run away from the buildings near the slope whenever it rains with the fear that the building itself will not be able to withstand the next landslide. Bulkheads are necessary to keep debris and water from accumulating.

The principal has already approached the school's concern on safety with the contractor. However, Mr. Silverio R. Alvinda Jr. only responded with hostility and disrespect to all school staff and the principal. The contractor had destroyed school fencing without permission from the management, trespassed within the premises and operated before their permit was ever released and has continually disrespected school staff, yelling profanities and threatened with force if they were to continue complaining about the slow removal of the slope that poses a huge threat to safety of school goers. The contractor operates with no urgency to remove this hazard, further extending the exposure of the school population to landslides, flooding, physical injury due to slipping hazard, and eventually disease hazard brought on by mosquitoes. At one point in time according to school staff, the contractor deliberately dumped logs near pathways with no safety precautions, but is no longer present at the time of assessment.

With the school's concern for safety continually being brushed off by the contractor and with the frequent hostility of Mr. Alvinda Jr, the principal decided to bring the concern to local authorities at the barangay on August 04, 2021. The contractor did no effort still to install safety precautions during this time nor did operations hasten. The school had also made a PTA Resolution moving to cancel the contract and permit of the contractor and replace them with a more responsible company. Due to the repeated hostility and disregard of the contractor to safety issues presented by the school, it is strongly recommended to have their permit cancelled and have them replaced by a more responsible and fast-acting contractor or agency.

Photo Documentation



The Assessment team observing the problematic slope. On the left, the school building only about 10meters from the mountain slope (northside of the school premises) with an approximate slope height of around 15-60ft. No slope protection, temporary drainage or safety measures, lines and signages present or installed during the date of assessment.



The Assessment team together with school staff conducting ocular inspection of the hazardous slope at the northside area of the school premises.



The side of Building 1 during the date of assessment with large accumulations of mud, dirt and gravel. Recent reports indicate the accumulation has gotten higher almost entering the classrooms. The mud has effectively clogged the drainage system rendering this restroom useless and dangerous for usage.



The rainwater runoff from outside seeping in the restroom drain from the above photo due to heavily and completely blocked drainage outside. The runoff, clearly having no other drainage to flow into, is no seeping inside the building through its restroom drains in the first floor.



A panoramic view of the expanse of the hazardous slope. Its size compared to the three-story Building 1, people and the backhoe during the assessment date. As observed, no slope protection, temporary drainage or safety measures, lines and signages present or installed during the date of assessment.



The parking space with evident slipping hazard. Accidents regularly happen in this area since the start as the contractor did not install a temporary waterway to redirect rain runoff from their operations away from the school premises. The runoff consists of both water and silt from the massive slope.



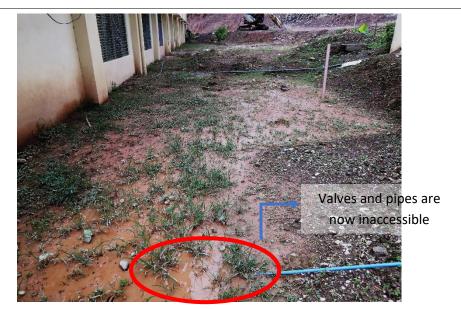


The same slope with barely no change in volume after almost a month of assessment. This photo was provided on Sept. 16, 2021 by the school administration as barely no sense of urgency is being implemented by the contractor. As observed, still after almost a month, no safety measures on both the site and its workers are installed and imposed.





The Assessment team discussing the concerns and other observations regarding hazards with the school principal and staff present.



Pipes buried along with its valves by the accumulation of mud, gravel and water from the slow-running operations of removing/leveling the hazardous slope.



Water becoming stagnant as drains are completely blocked and flow is collected towards the school buildings. This accumulation of water may become a breeding ground for dengue-carrying mosquitoes, thereby becoming an alarming health hazard to the school population as well as contractor workers.



The water pools by the school buildings due to the basins formed from the poor attempt on an ineffective temporary drainage dug along the building sides. Blocked in many parts, the water ends up being collected in the area instead, and becoming stagnant. Recently now, around October 2021, the building wall is buried by more soil and debris accumulation and is nearly entering the windows.



Mud pushed down from the slope onto the nearest buildings, only a foot away from entering first floor classrooms and windows during the date of assessment. Recent reports on October 2021 indicate that the mud is nearly entering the windows.

Ways Forward

- As far as the PDRRMO's capacity, it is recommended to relocate the buildings to a safer area in relation to the slope.
- A thorough inspection of the authorities should be done to have a more detailed and technical data of the condition of the area, thus, making a sounder solution to the current situation of the school.
 - Mines & Geosciences Bureau
 - Provincial Environment & Natural Resources Office
 - Department of Education
 - Municipal Engineering Office of El Nido

- Municipal DRRM Office of El Nido
- Provincial Engineering Office
- If the above-mentioned recommendations are not favorable, then a
 retaining wall/bulkhead should be constructed spanning the entirety of the
 school buildings. This action should be able to withstand the potential
 extent of the effect of the hazard to the elements at risk.
- Authentication check of JZ and JS Trading permits since they have apparently been operating even before securing permits from proper authorities.
 - Mines & Geosciences Bureau
 - Provincial Environment & Natural Resources Office
- Have the following offices consider the cancellation of the permit and replacement of the current contractor to ensure efficient, fast, and safe removal and/or leveling of the hazardous slope.
 - Mines & Geosciences Bureau
 - Provincial Environment & Natural Resources Office
 - Department of Education
 - Municipal Engineering Office of El Nido
 - Municipal DRRM Office of El Nido
 - Provincial Engineering Office
- Urge Provincial Engineering Office to hasten the operations to remove the immediate hazard and establish protective measures.
- The stagnant water must be removed, a proper drainage must be installed and bulkheads/revetments/ slope protection must be constructed to protect school structures before the return of the learners to the school to avoid imminent danger of diseases brought by mosquitoes, landslide, flooding, and slipping risks especially to the nearest school buildings adjacent to the steep slope and the reclaimed area at the back.

Signatories

Prepared by:

MARIA ALYSSA G. ABONALES

Sr. Admin Asst. I Research & Planning Section Staff

Recommended by: Approved by:

EnP NESTOR A. ASAG, MPA
LDRRMO III
Research & Planning Division Chief

JEREMIAS Y. ALILI PGDH – PDRRMO

- **ATTACHMENTS** (May include list of participants, communications, implant, concept paper, etc...)
 - o FILLED-UP ASSESSMENT TOOL
 - SCHOOL DIRECTORY
 - JZ AND JS TRADING CERTIFICATE OF ACCREDITATION FROM DENR MGB
 - o JZ AND JS TRADING ORE TRANSPORT PERMIT
 - o JZ AND JS TRADING CERTIFICATE OF REGISTRATION
 - TRANSMITTAL LETTER OF MGB TO JZ AND JS TRADING ON THEIR REPORT FOR GEOHAZARD INVESTIGATION OF UNSTABLE SLOPES NEAR BAROTUAN NATIONAL HIGHSCHOOL
 - BAROTUAN NATIONAL HIGH SCHOOL COMMUNICATION LETTER TO JZ AND JS TRADING TO DISCONTINUE THEIR QUARRY OPERATIONS WITHOUT PROPER PERMIT
 - JZ AND JS TRADING COMMUNICATION LETTER TO BAROTUAN NATIONAL HIGH SCHOOL ON OF CONTINUING THEIR QUARRY OPERATIONS



BAROTUAN NATIONAL HIGH SCHOOL Barotuan, El Nido, Palawan

PERSONNEL CONTACT INFORMATION SY 2020 - 2021

1		GH DEPARTMENT	
-	NAME	SECTION/ADVISORY	CONTACT NO
-	AINA JOYCE R. DICHOS	Grade 7 - Amethyst	0927-806-773
	CARINA C. DELA TORRE	Grade 7 - Diamond	0916-572-7995
3	AVERDINE N. MEJIA	Grade 7 - Jade	0975-268-9643
4	RAYMOND C. ABAÑO	Grade 7 - Ruby	0907-683-2430
5	EDISSA V. PACALDO	Grade 7 - Topaz	0919-703-9896
6	FRANCISCA F. PADON	Grade 8 - Aquarius	0906-639-2883
7	ANGEL KEM R. AGAYON	Grade 8 - Capricorn	0917-458-6706
8	MARY ANTONETTE L. SIMEON	Grade 8 - Gemini	0915-922-0255
9	JANYL C. DALDE	Grade 8 - Libra	0950-802-0072
10	ARISH R. BEBIANO	Grade 8 - Pisces	0916-331-8541
11	MARY ALPE E. BERDENSEN	Grade 9 - Altair	0926-001-4932
12	SHERYL M. CORVERA	Grade 9 - Alzirr	0909-473-8267
13	NOIME L. HERMOGENO	Grade 9 - Antares	0975-853-5325
14	NURIEL T. BARRIENTOS	Grade 9 - Bellatrix	0995-964-9929
15	ARLENE B. EDEM	Grade 9 - Betelgeuse	0967-944-1949
16	MARIA IRISH GRACE T. HEREDERO	Grade 10 - Earth	0999-834-9443
	JURIE O. MABAYAG	Grade 10 - Jupiter	0909-151-3103
18	MARJORIE B. CARREON	Grade 10 - Mars	0905-857-3067
-	AIZA KAYE S. FERNANDO	Grade 10 - Neptune	0929-887-8097
-	CLAUDINE G. POSEO	Grade 10 - Saturn	0955-432-1502
	MARICRIS S. BELARMINO	Grade 10 - Venus	0950-823-4512
-	DIVINE GRACE L. BONBON	School Librarian	0936-560-3623
	JULIE CRIS T. CORONG	ICT Coordinator - JHS	0916-572-7974
	DARLENE M. JOSE	School Registrar/Prop. Cus.	0945-693-7711
	MILDRED P. SALVADOR	Canteen Manager	0955-500-5739
27	ROLANDO M, DUNQUE JR.	Volunteer Teacher	0935-469-5638



Republic of the Philippines

Department of Environment and Natural Resources MINES AND GEOSCIENCES BUREAU MIMAROPA Region

7/F DENR Building 1516 Roxas Boulevard, Ermita, Manila Telefax No. (+632) 536-0215 (+632) 310-1369 Email: region4b@mgb.gov.ph



CERTIFICATE OF ACCREDITATION

No. CA-2021-004-MIMAROPA

This is to certify that **JZ AND JS TRADING**, with business address at Brgy. Barotuan, El Nido, Palawan is an accredited DEALER, TRADER and RETAILER of Minerals, Mineral Products and/or By-Products pursuant to Section 54 of Republic Act No. 7942, otherwise known as the *Philippine Mining Act of 1995*, Section 128 of DENR Administrative Order No. 2010-21, the Implementing Rules and Regulations of the said Act, and Regional Memorandum Order No. 2020-07.

This Certification shall be valid only for the approximate volume of 50,000 cubic meters of soil materials removed from unstable slopes near Barotuan National High School for safety purposes.

This Certification shall be valid until the above-cited volume is removed from the area or until 21 July 2023, whichever comes first.

Issued this 22nd day of July 2021.

ENGR. GUANNARCELO C. NOBLE

Regional Divertor

Fees paid:

O. R. No. Amount Date : 3021769 : PhP5,000.00 : 16 July 2021

"MINING SHALL BE PRO-PEOPLE AND PRO-ENVIRONMENT IN SUSTAINING WEALTH CREATION AND IMPROVED QUALITY OF LIFE."



Republic of the Philippines

Department of Environment and Natural Resources MINES AND GEOSCIENCES BUREAU MIMAROPA Region

7.5 DENR Building, 1515 Rosas Boulevard, Ermte, Manila Telefas No. (+632) 536-0215 - (+632) 310-1369 Email: region4b@mgb.gov.ph



ORE TRANSPORT PERMIT

OTP-JZJS-107-01-2021-MIMAROPA

			Date	Z3-Jul-Z1		
1	Name of Permit Holder	JZ and JS Trading				
2	Contract/Permit No.	CA-2021-004-MIMAROPA	Date Issued	22 July 2021		
3	Operator	JZ and JS Trading	•			
	(Address of the company)	Bgy. Barotuan El Nido, Palawan				
4	Transporter	JZ and JS Trading				
	(Address of the company)	Bgy. Barotuan El Nido, Palawan				
	Truck Registry No.	2	or Ship No.	N/A		
5	Buyer/s	Javetarez Housing, Hon. Aracel Bacolod, Kingson Construction				
	(Address of the company)	Bgy. Barotuan, Bgy. Bucana, Bgy. Villa Libertad, El Nido, Palawan				
6	Commodity	Waste Material				
7	Tonnage or Volume	50,000 cu.m.				
		(Metric ton/Cubic Meter)				
8	Value	PhP1,500,000.00 (Estimate ± 10%)				
9	Source	Bgy. Barotuan El Nido, Palawan				
10	Destination	Bgy, Barotuan, Bgy, Bucana, Bgy, Villa Libertad, El Nido, Palawan				

ENGR. GLEN ELO C. NOBLE Director

073021-R048-1247

Date 29- Jul-21

Note:

1 This OTP is valid within one (1) month from the date of issuance

2 Subject to the payment of

OTP Fees Paid

OR No.

OR No. 3021777

Amount

1,000.00 July 29, 2021

cc: THE REGIONAL DIRECTOR

DENR MIMAROPA Region

OFFICE OF THE GOVERNOR

THE SANGGUNIANG PANLALAWIGAN

Province of Palawan Puerto Princesa City

Palawan Provincial Government Puerto Princesa City

"MINING SHALL BE PRO-PEOPLE AND PRO-ENVIRONMENT IN SUSTAINING WEALTH CREATION AND IMPROVED QUALITY OF LIFE." Republic of the Philippines

Department of Environment and Natural Resources

MINES AND GEOSCIENCES BUREAU

MIMAROPA REGION

7/F DENR Bldg., 1515 Roxas Blvd., Ermita, Manila

CERTIFICATE OF REGISTRATION

The filing fee thereto having been paid the foregoing instrument was registered in this Office at 2:20 pm hrs. on July 29, 2021 has been recorded on Book No. 1 of this Region on page 90 as Document No. 08 of Miscellaneous Documents.

Registration Fee paid under <u>Official Receipt No. 3021776 C</u> <u>dated July 29, 2021</u> in the amount of <u>P 1,000.00</u>.

ENGR. GLENNAGCELO C. NOBLE

Medional Director



Republic of the Philippines Department of Environment and Natural Resources MINES AND GEOSCIENCES BUREAU

MIMAROPA Region

7 F DEVR Building - 515 Rocan Box evant Erinta Manita Twasta No. 1452 - 514/2015 - 452 (513-158) Ernet lapton-billings of 27

6 February 2020

MR. SILVERIO R. ALVINDA JR.

JZ and JS Trading Owner El Nido, Palawan

Dear Mr Alvinda:

We are pleased to furnish you herewith a copy of the report entitled "Geohazard Investigation of Unstable Slopes Near Barotuan National High School, El Nido, Palawan" prepared by Supervising Geologist Jan Albert Macario B. Galang of this Office.

This report contains the details of the assessment conducted by the assigned technical personnel regarding the slope investigation of Barotuan National High School.

Should you have any further query regarding the above-mentioned report, please feel free to reach us at the address indicated above.

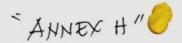
Thank you and best regards.

Very truly yours,

By Authority of Regional Director:

EDWIN M. MOJARES Ph.D. Chief, Geosciences Division OIC, Office of the Regional Director

cc. Amsie A. Aniasco, Ed.D, Principal II, Barotuan National High School





Republic of the Philippines Department of Education SCHOOLS DIVISION OF PALAWAN

May 18, 2021

MR. SILVERIO R. ALVINDA Barangay Barotuan, El Nido, Palawan

Sir:

This is to respectfully inform you that I am temporarily disallowing you to get, haul and excavate the mountain at the back of our school until you settle the misbehavior or problem you cause. I am requesting you to stop your activity inside the school after such time that you settle the misbehavior you cause.

Thank you

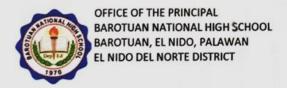
Very truly yours,

AMSIE A ANIASCO, Ed.D.

Principal/II

Copy furnished:

HON. RICHARD B. TENORIO Barangay Captain



JZ and JS TRADING Taberna Barangay Barotuan El Nido, Palawan

August 2, 2021

Amsie A. Aniasco Principal II Barotuan National High School Barangay Barotuan ElNido, Palawan

Madam:

Good day!

This is respectfully to inform in your good office that we will resume operations at the mountain quarry behind at Barotuan National High School, with the permission of Mines and GeoSciences Bureau Mimaropa Region under permit number CA-2021-004-MIMAROPA. I am also inform you that we will open the gate when we enter and also close it when we leave.

Thank you so much, God bless you more!

Very truly yours,

SHLVERIO R. ALVINDA IR.

Owner

JZ and JS Trading